DOCUMENT RESUME

ED 164 158 RC 010 839

AUTHOR	Fratoe, Frank A.
TITLE	Rural Education and Rural Labor Force in the Seventies. Rural Development Research Report No. 5.
INSTITUTION	Economics, Statistics, and Cooperatives Service (DOA), Washington, D.C.
PUB DATE	Oct 78
NOTE	47p.
EDRS PRICE	MF-$0.83 HC-$2.06 Plus Postage.
DESCRIPTORS	Academic Achievement; Adult Education; Ancillary Services; College Planning; *Economic Disadvantagement; Enrollment; *Expenditures; Functional Illiteracy; Income; *Labor Force; Migration Patterns; Occupational Choice; *Rural Development; *Rural Education; *Rural Urban Differences; School Personnel; Vocational Education
IDENTIFIERS	*Nonmetropolitan Areas

ABSTRACT

Despite developmental efforts and a relatively larger population growth rate in nonmetro areas since 1970, rural/nonmetro people are still behind their metro counterparts in terms of wage levels, family income, adequacy of housing, and access to essential public services like education and health care. Rural public school education lags behind metro central and suburban public school education in virtually all areas. Rural students not only attend schools with fewer support staff and services, less revenue, and less per pupil funding, but they are also more likely to enroll in school later, progress through school more slowly, complete fewer school years, and score lower on national tests than students attending metro area schools. Federal aid to metro central schools in 1972-73 was $133.33 per student, but only $91.10 to nonmetro students. Rural public schools spent less per pupil than metro central or suburban public schools in all categories except student transportation during that year. High proportions of rural students fail to graduate from high school or attend college. Since many of them do not get the higher education necessary for white collar or professional jobs, these students tend to enter the labor force in blue collar and other lower paying occupations. (Author/BR)

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RURAL EDUCATION AND RURAL LABOR FORCE IN THE SEVENTIES

Frank A. Fratoe

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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U.S. Department of Agriculture
Economics, Statistics, and Cooperatives Service

Rural Development Research Report No. 5

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RURAL EDUCATION AND RURAL LABOR FORCE IN THE SEVENTIES. By Frank A. Fratoe, Sociologist, Economic Development Division, Economics, Statistics, and Cooperatives Service, U.S. Department of Agriculture. Rural Development Research Report No. 5.

ABSTRACT

Rural public school education lags behind metro central and suburban public school education in virtually all areas. Rural schools, with less revenue and support staff, are educating students who are more likely to enroll in school later, complete fewer school years, score lower on national tests, and fail to attend college than metro students. Since a greater proportion of these students do not get the higher education necessary for white collar or professional jobs, they tend to enter the labor force in blue collar or other lower paying occupations.

Key words: Rural education, rural schools, rural labor force, rural development

ACKNOWLEDGMENTS

The author wishes to thank the following members of the Economic Development Division for their valuable comments and assistance in preparing this report: Robert Coltrane, William Fox, Virginia Getz, Bernal Green, Max Jordan, and Leslie Smith.

Washington, D.C. 20250 October 1978

PREFACE

This study explores the relationship between education and rural development. Emphasis is placed on determining the educational characteristics of rural workers, particularly to see if their schooling compares with that of those living in urban areas. No attempt is made to establish a minimum level of schooling necessary to sustain rural economic growth. Even if the theoretical groundwork to make such a determination existed, that is not the intent of this report.

Although the study focuses on the educational background of rural labor force members, it is also designed to give a broad look at the current rural education situation, using the latest available data. This will provide a logical starting point for examining specific rural education issues in later studies.

Secondary data furnished by several agencies of the Federal Government were used in the report. Because these agencies collected and categorized data according to different criteria, the population groups referred to in the report are not always comparable (such as metro-nonmetro vs. urban-rural).

Evidence presented here suggests that migration may be a confounding factor since many better educated rural people move to urban areas. Migration may partially explain why the attainment levels of the rural labor force and rural residents as a whole are comparatively low. It does not, however, have a direct bearing on differences concerning other variables, such as preprimary enrollment, academic achievement, and plans for college. Nor does migration account for the relative lack of support programs and staff in rural school systems.

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SUMMARY

Rural public school education lags behind metro central and suburban public school education in virtually all areas. Rural students not only attend schools with fewer support staff and services, less revenue, and less per pupil funding, but they are also more likely to enroll in school later, progress through school more slowly, complete fewer school years, and score lower on national tests than students attending metro area schools.

This report examines educational services and aid to rural public schools and how they relate to the rural labor force. Evidence shows, for example, that Federal aid to metro central schools in 1972-73 was $133.33 per student, but only $91.10 to nonmetro students. Rural public schools spent less per pupil than metro central or suburban public schools in all categories except student transportation during that year.

High proportions of rural students fail to graduate from high school and attend college. Since many of them do not get the higher education necessary for white collar or professional jobs, these students tend to enter the labor force in blue collar and other lower paying occupations.

Regions identified in this report are defined as:

NORTH ATLANTIC

Connecticut
Delaware
District of Columbia
Maine
Maryland
Massachusetts
New Hampshire
New Jersey
New York
Pennsylvania
Rhode Island
Vermont

SOUTHEAST

Alabama
Arkansas
Florida
Georgia
Kentucky
Louisiana
Mississippi
North Carolina
South Carolina
Tennessee
Virginia
West Virginia

GREAT LAKES AND PLAINS

Illinois
Indiana
Iowa
Kansas
Michigan
Minnesota
Montana
Nebraska
North Dakota
Ohio
South Dakota
Wisconsin

WEST AND SOUTHWEST

Alaska
Arizona
California
Colorado
Hawaii
Idaho
Montana
Nevada
New Mexico
Oklahoma
Oregon
Texas
Utah
Washington
Wyoming

Rural Education and Rural Labor Force in the Seventies

Frank A. Fratoe

INTRODUCTION

The role of an educated labor force in rural development and the educational quality of the rural labor force are two topics that have not been well represented in the growing research effort devoted to the social and economic advancement of rural America. It is thus hoped that this report will partially satisfy an important research need.

Policy-oriented research on current social trends in rural America, including educational trends, should be a key component of any basic research program concerned with rural development matters. Such research is necessary to comprehensively monitor how social systems in rural America have changed and to provide an information base for future transformations. The results of research can help policymakers focus on emerging rural social and economic problems, as well as clarify development issues, choice of goals, selection of strategies, and program implementation design (10, pp. 70-71). 1/ All that can be claimed for the present research effort, however, is that it may contribute to a better understanding of one rural development issue: the educational preparation of the rural labor force.

The quantitative evidence in this report has been collected from secondary sources, published and unpublished, supplied by the Bureau of the Census, the National Center for Education Statistics, and the Bureau of Labor Statistics. Since the data were originally obtained through sample surveys, estimates based on them may differ from figures resulting from a complete census. The sample populations were not always similarly defined by these agencies; thus all definitions contained in table footnotes should be examined to ascertain the actual populations and subpopulations. Because population statistics are variously classified under "rural" or "nonmetro" categories, the single designation "rural/nonmetro" will be used throughout the report. 2/ The latest available data have been cited in all cases.

1/ Underscored numbers in parentheses refer to literature listed in the references section at the end of this report.

2/ Although the term "rural/nonmetro" may be somewhat awkward, there is no prevalent, comprehensive word that describes the two general populations under consideration here.

RURAL/NONMETRO DEVELOPMENT

Overview of Concept

There are many definitions for the term "rural/nonmetro development." It has been variously described as: (1) Improvements or gains for rural/nonmetro persons, communities, or other units on variables such as income or education; (2) movement toward some projected future state defined to be desirable, such as self-sustained economic growth; (3) increased capacity of individuals and systems, such as capacity to use resources; (4) a higher level of differentiation in roles and functions for individuals and other social units; (5) increasing work and nonwork options open to individuals, (6) sustained production of a surplus of products and/or skills, (7) satisfying basic human physiological and psychological needs; and (8) improving the quality of life (6, p. 21; 16, pp. 57-58).

Crystallizing a single definition of rural/nonmetro development from the above list may not be possible or even advisable, since different policy directions find certain definitions more appropriate. It is clear, however, that a single element underlies all of these meanings, that is, a futuristic view where particular goals are valued and social modifications are initiated to attain the goals (4, p. 265). Such modifications may be directed toward individuals or groups in any of the major social institutional areas--economic, political, educational, and so on. Obviously, rural/nonmetro development includes only those social institutional units that exist in low-density areas and smaller communities away from cities.

Objectives

One impetus to recent rural/nonmetro development efforts came from the belief that massive migrations of people to metro areas produced demands for housing, employment, and public services that the cities could not sustain, as well as adding to existing problems of metro congestion and poverty. It was thought that rural/nonmetro development could halt the population flow by making economic and social conditions in rural/nonmetro communities so attractive that residents would not be inclined to migrate. Thus, rural/nonmetro development was seen as a means for reducing both the population pressures on cities and subsequent metro social problems (25, p. 2; 45, p. 12).

Another objective came from the recognition of inequities and the desire to eliminate rural/nonmetro deficits in areas such as income, housing, health care, and education. Although urban areas also have pressing needs, in general, they enjoy greater proportional benefits from the Nation's economic growth. Some rural/nonmetro areas simply do not have the comparable physical resources, distribution of occupational skills, and transportation facilities to offer equally significant opportunities for growth (13, p. 4; 15, p. 16).

Balanced national growth constituted yet another objective. For new metro industries to prosper, it is necessary to have mass markets in rural/nonmetro areas, and those markets can exist only with increased employment and widely distributed purchasing power. National growth cannot be fostered through metro development alone, with the expectation that benefits produced by such development will somehow spread to rural/nonmetro areas. National welfare can be enhanced by a wider geographic dispersion of economic and social opportunities, although specific development policies followed in metro and rural/nonmetro sectors might require different approaches (3, pp. 12-13; 5, p. 5).

Efforts

The efforts undertaken to promote rural/nonmetro development have focused on several types of programs. Community development programs have included health service construction, development loans and grants, housing loans, water supply and sewage disposal systems, industrial parks, and transportation. Agricultural and natural resource development has encompassed direct payments to farmers, conservation programs, farm loans, parks and forests preservation, and agricultural extension. Human resource development--on which this report bears--has comprised manpower training programs, social security, vocational rehabilitation, health care services, employment opportunities, programs for Indians and other special rural/nonmetro groups, and improvements to schools (13, p. 11). 3/

While this report does not intend to discuss every governmental or private effort devoted to rural/nonmetro development (programs and expenditures of the Federal Government alone would require lengthy cataloging), mention should be made of some current Federal actions supporting rural education. The U.S. Department of Agriculture's Extension program, which channels information through the land-grant university system, has helped local people plan community development programs. The Veterans Administration distributes educational benefits to veterans and their dependents, many of whom are rural/nonmetro residents. The U.S. Department of Labor funds manpower training through the Migrant/Seasonal Farmworker Program, Indian Manpower Program, Job Corps, and other services. 4/ The U.S. Department of Health, Education, and Welfare's Office of Education yearly directs large sums to rural/nonmetro areas for vocational and adult education, libraries, bilingual programs, education of the disadvantaged, supplemental education centers, dropout prevention, teacher training, and others (41, pp. 48-50, 87-91). However, as will be seen later, rural/nonmetro areas do not always receive a proportionately equitable share of Federal education assistance to spend on development.

UNDERDEVELOPMENT AND THE RURAL/NONMETRO LABOR FORCE

Underdevelopment

Despite these developmental efforts and a relatively larger population growth rate in nonmetro areas since 1970 (1), rural/nonmetro people are still behind their metro counterparts in terms of wage levels, family income, adequacy of housing, and access to essential public services like education and health care (46, p. 13). One in six rural/nonmetro residents lives below the poverty line, compared to one in nine in metro areas (5, p. 1). Economic problems in rural/nonmetro areas stem from several factors including the historically downward trend of employment in agriculture, mining, and forestry, a trend that has not been offset until recently by gains in nonfarm industries. Although the rural/nonmetro employment picture is now somewhat brighter, manpower development and utilization remain critical issues (12, p. 550).

These facts must be understood within the wider context of the rural/nonmetro economic situation. There is a great range in the incomes and standards of living

3/ Most of these human resource programs are national in scope and not directed solely at rural/nonmetro areas, but they have provided assistance to the latter.

4/ These are not rural programs *per se*, but rural residents do participate in them.

experienced by local residents. Some of the highest incomes are earned from large-scale farming. Others successful in agricultural pursuits are those supplementing their income with substantial nonfarm earnings. Nonfarm workers employed full time in manufacturing, agribusinesses, and professional services often have good incomes as well. Yet numerous rural/nonmetro citizens have low incomes and substandard living conditions, including low-volume farm operators with few agricultural resources and little or no nonfarm employment. Many hired farm laborers also have low incomes as do other workers who, because of age or poor training, are unable to find satisfactory employment in either farm or nonfarm sectors (2, p. 65).

Cycle of Underdevelopment

Employment opportunities in agriculture have decreased because of labor-reducing technological improvements and the declining number of farms. This in turn has reduced the economic base of many rural/nonmetro communities and resulted in a self-perpetuating cycle of decreasing work opportunities, underemployment, and deteriorating community life. Along with the decline in farm employment has been an accompanying decline in nonfarm work opportunities, as less demand has been placed on business to provide agricultural services. Technological developments in mineral and logging industries have helped create similar problems in some areas dependent on the producing and processing of coal, lumber, and other raw materials (2, p. 53). 5/

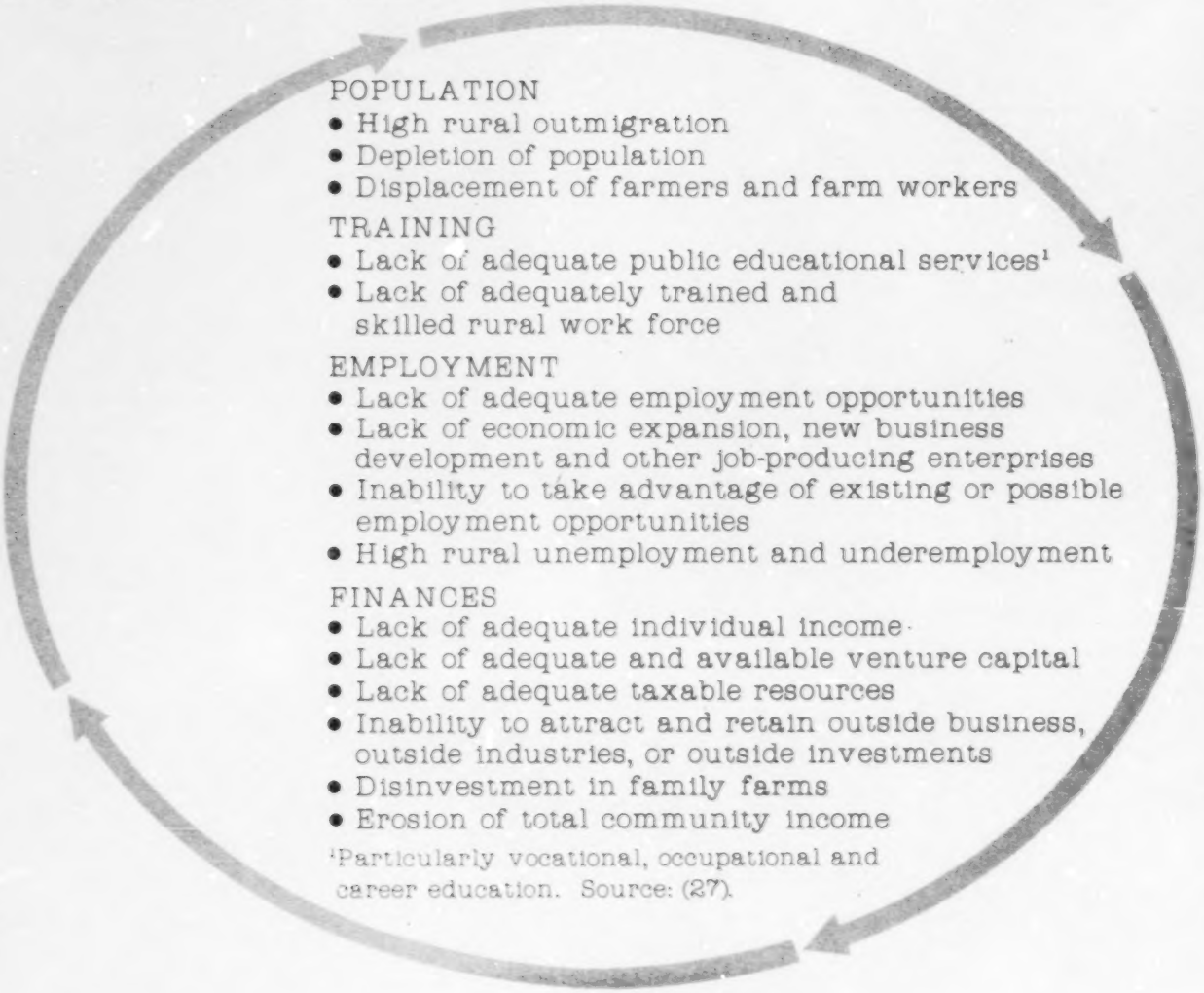
One consequence of these events has been that large members of business firms have disappeared from the rural/nonmetro scene. Costs per person have also risen for local public services such as schools, roads, mail deliveries, and electricity. Some local governments have found it difficult to raise the revenue necessary for their continued functioning. Declining opportunities in agriculture and the subsequent search for nonfarm employment by farm laborers and small farmers have left many people stranded in areas where there is not much demand for their labor (13, p. 2). Those who are able (mostly young people) leave to find work in the cities, causing rural/nonmetro communities to lose future leadership. Those residents who remain are left to lead deteriorating financial, political, religious, and educational organizations which will have even less capacity to furnish employment later.

Sher's portrayal of the rural underdevelopment cycle summarizes this phenomena (fig. 1) (27, p. 298). It remains to be seen whether the recent reversal of outmigration patterns in some areas will significantly alter the underdevelopment cycle.

The cycle of rural/nonmetro underdevelopment is composed of many social and economic elements only suggested in figure 1. Policy planning designed to break this cycle would have to analyze each element and consider whether development efforts should be keyed to overcoming the deficiencies of a single element or several interrelated ones. The approach taken in any particular case might depend more on certain practical issues (such as local political preferences) than on theoretical planning processes. But formal planning procedure demands that all elements be given equal weight for research purposes to determine which may be most fruitful for general policy concentration. Planning that neglects any part of the underdevelopment cycle would leave a serious gap in rural/nonmetro development research and perhaps jeopardize successful policy implementation.

5/ Recently the employment situation in rural/nonmetro areas has improved; nonmetro nonfarm employment is increasing and employment losses in agriculture have about stopped. Whether this can offset the economic impact of decades of decline is an open question.

Figure 1
CYCLE OF RURAL POVERTY AND UNDERDEVELOPMENT


POPULATION
• High rural outmigration
• Depletion of population
• Displacement of farmers and farm workers
TRAINING
• Lack of adequate public educational services[1]
• Lack of adequately trained and skilled rural work force
EMPLOYMENT
• Lack of adequate employment opportunities
• Lack of economic expansion, new business development and other job-producing enterprises
• Inability to take advantage of existing or possible employment opportunities
• High rural unemployment and underemployment
FINANCES
• Lack of adequate individual income
• Lack of adequate and available venture capital
• Lack of adequate taxable resources
• Inability to attract and retain outside business, outside industries, or outside investments
• Disinvestment in family farms
• Erosion of total community income
[1]Particularly vocational, occupational and career education. Source: (27).

One element neglected until recently has been education (43), both with respect to educational services and training of the labor force (fig. 1). While education alone cannot solve the rural/nonmetro development problem, it is certainly an important factor in research and application strategies (3, p. 14). The argument has been made that many rural/nonmetro people possess an educational background insufficient to obtain satisfactory employment, particularly as labor force requirements in most areas become less centered on agriculture and its related services (16, p. 33). These people, it is asserted, are not intrinsically less educable but are victims of inferior schooling because inadequate revenue in rural/nonmetro areas leads to out-of-date school facilities, understaffing, deficient curricula, and lack of specialized services such as counseling and vocational training (28, p. 7).

The research in this report emphasizes the formal educational system; that is, schools with their organized learning programs and teaching personnel, as opposed to informal educational arrangements. People do learn through exposure to newspapers,

magazines, books, movies, radio, and television, and through normative interaction in their families and other social groups. Some of the things learned in these ways might well be helpful toward advancing employment (3, p. 18). For example, family relationships are key determinants of commitment to work values and acceptance of discipline. Because the major burden for educating young people falls upon the schools, however, they become the focus for developing not only basic computational and communication skills but also the advanced training necessary for career preparation (12, p. 158).

EDUCATIONAL INPUTS FOR THE RURAL/NONMETRO LABOR FORCE

School Services

Expenditures

Rural/nonmetro public school systems during 1972-73 expended less per pupil than metro central or suburban public school systems for all account categories except pupil transportation services (21) (table 1). For instance, on the average rural/nonmetro schools spent $170 less per pupil for instruction than metro central schools and $115 less than metro suburban schools (table 1). A similar pattern occurs in all four regions--North Atlantic, Great Lakes and Plains, Southeast, and West and Southwest. The highest instructional expenditures by rural/nonmetro schools--$699 per pupil--came in the North Atlantic region, still more than $230 less than metro central. The lowest came in the Southeastern region--$488 per pupil, or about $80 below metro central levels.

Expenditures for pupil transportation services, on the other hand, were higher in rural/nonmetro areas. Again, a similar general pattern held in each region. Only in the North Atlantic States were transportation expenditure differences between metro central and rural/nonmetro school systems somewhat close ($9); elsewhere there was a much wider gap ($36 in the Great Lakes and Plains, $18 in the Southeast, and $30 in the West and Southwest). The sources of these differences are not difficult to discover. Rural/nonmetro school systems must pay high pupil costs for transportation because a large proportion of students are transported and distances traveled are great. When the full costs of busing are not covered by the State, rural/nonmetro school districts must pay the amount not covered from funds that could otherwise be used for instruction (28, p. 3).

Observers have noted several reasons for the generally low per pupil expenditures in rural/nonmetro areas. First, attempts to raise property taxes to provide greater support for schools can be especially burdensome in capital-intensive agricultural areas, particularly where industrial property owners are few. Furthermore, the lower incomes of rural/nonmetro citizens affect their ability to support school services; although education costs are financed primarily by the property tax, this tax is paid from income. But even where there is ability to furnish more tax support for education, there may be little enthusiasm to do so. Better educated young people are more likely to leave the local area after graduation if suitable employment opportunities are absent. Older people left behind are reluctant to spend more on schools because they foresee little benefit for their communities (28, p. 7).

Revenues

The reluctance or inability of rural/nonmetro residents to pay for school services is reflected in the data on revenue receipts (21). Nationally (1972-73), local sources accounted for less than half (43.9 percent) of rural/nonmetro public school system revenue, while the comparable figures for metro central and suburban areas were over

Table 1--Average expenditures per pupil by account category and average daily enrollment in local public school systems, by selected categories, 1972-73 1/

Region and metro-nonmetro status	Total	Administration	Instruction	Attendance and other services	Pupil transportation services	Plant operation and maintenance	Fixed charges	Average daily enrollment
	Dollars							Number
United States	921.48	2.95	658.92	9.52	35.64	101.05	83.40	45,053,034
Metro:								
Central cities	1,023.93	33.04	738.59	14.44	23.98	116.70	97.19	11,509,105
Suburbs	958.48	33.56	683.79	9.15	34.85	106.75	90.38	18,191,623
Nonmetro	800.84	32.16	569.73	6.26	45.33	82.57	64.79	15,352,305
North Atlantic	921.48	2.95	658.92	9.52	35.64	101.05	83.40	45,053,034
Metro:								
Central cities	1,328.96	40.84	937.81	21.77	51.17	131.74	145.63	2,991,371
Suburbs	1,181.12	41.32	805.47	18.17	51.77	128.08	136.31	5,408,520
Nonmetro	1,026.73	35.61	699.29	15.24	60.74	104.49	111.36	2,404,465
Great Lakes and Plains	941.53	34.33	663.50	7.68	35.76	111.64	88.61	12,660,819
Metro:								
Central cities	1,054.04	32.89	736.56	17.45	14.93	137.07	115.14	3,143,172
Suburbs	942.19	34.29	673.53	4.68	34.68	111.20	83.82	4,846,677
Nonmetro	865.14	35.33	603.94	4.22	50.91	95.00	75.73	4,670,969
Southeast	701.24	24.08	527.15	4.56	28.69	71.11	45.65	9,954,820
Metro:								
Central cities	755.30	25.75	570.12	5.86	16.80	90.49	46.28	1,704,484
Suburbs	759.11	21.36	573.69	3.86	24.35	82.71	53.14	2,887,330
Nonmetro	652.90	25.00	488.45	4.52	34.81	58.70	41.42	5,363,005
West and Southwest	840.89	32.58	618.50	7.40	24.79	93.99	63.64	11,633,037
Metro:								
Central cities	874.28	30.19	656.18	9.87	12.90	99.17	65.97	3,670,075
Suburbs	849.64	32.52	626.28	6.81	22.90	93.38	68.75	5,049,096
Nonmetro	783.66	37.40	557.56	5.31	43.04	88.51	51.84	2,913,866

1/ A school system coterminous with or located within the boundaries of a Standard Metropolitan Statistical Area (SMSA) central city is classified as "metro, central;" if located within an SMSA but outside the central city, it is classified as "suburban." If, as in some large county-unit school systems, the population of a central city (1960 census) within the system was 50 percent or more of the county population, the systems are regarded as "metro, central;" if less than 50 percent, "suburban." All school systems located outside of SMSAs are classified as "nonmetro."

Source: (21, table N.1 and N.2).

50 percent each (table 2). Local sources contributed more than half of total rural/nonmetro school revenue in only one region--Great Lakes and Plains (54.1 percent)--while it accounted for less than one-third in the Southeast (28.3 percent). Such data suggest that rural/nonmetro school systems must rely heavily upon outside funding.

Table 2--Distribution of public school system revenue, by source of funds and selected categories, 1972-73

Region and metro-nonmetro status	Local	Intermediate	State 1/	Federal	Total
			Percent		
United States	52.0	1.0	38.9	8.1	100
Metro:					
Central cities	54.5	.6	33.8	11.2	100
Suburbs	56.2	.7	38.2	4.9	100
Nonmetro	43.9	1.8	44.8	9.5	100
North Atlantic	55.9	--	37.3	6.8	100
Metro:					
Central cities	54.6	—	32.6	12.8	100
Suburbs	59.5	—	37.1	3.4	100
Nonmetro	48.6	—	45.4	6.0	100
Great Lakes and Plains	56.8	1.3	36.1	5.8	100
Metro:					
Central cities	56.9	.7	32.4	10.0	100
Suburbs	59.0	.8	36.9	3.3	100
Nonmetro	54.1	2.4	38.0	5.5	100
Southeast	36.4	.3	49.4	13.9	100
Metro:					
Central cities	42.6	.2	44.0	13.1	100
Suburbs	45.6	.5	44.1	9.8	100
Nonmetro	28.3	.1	54.8	16.8	100
West and Southwest	52.3	2.4	37.1	8.2	100
Metro:					
Central cities	56.6	1.5	32.5	9.5	100
Suburbs	53.5	1.6	38.4	6.5	100
Nonmetro	44.3	5.3	40.8	9.5	100

— = Not applicable.

1/ Revenue receipts from State sources do not include Federal funds distributed through the State education agency.

Source: (21, tables C.1 and C.2).

The largest outside funding source is the State. Some States have adopted weighting systems which result in proportionally greater distribution of funds to sparsely populated districts. States provided 44.8 percent of rural/nonmetro public school revenue nationally in 1972-73; rural/nonmetro schools in the Southeast actually

received over half (54.8 percent) of their revenue from this source (table 2). Intermediate agencies, through the services they offer, also channel State funds to local school systems. There is an ongoing debate over the advisability of having States assume full responsibility for supporting education by dispersing funds collected from sales or income taxes in order to shift the tax burden away from a heavy reliance on property taxes. This might result in a funding system generally more equitable for poorer school districts, including many rural/nonmetro ones, but as yet there is no consensus on the issue (28, p. 44).

The other major outside funding source is, of course, the Federal Government. Money given by Federal agencies to rural/nonmetro public schools compensates partially for inadequate local sources. For instance, 16.8 percent of Southeastern rural/nonmetro school revenue is supplied through Federal programs. But more Federal assistance overall goes to metro central schools than to rural/nonmetro ones (21). In 1972-73, the Federal Government furnished $133 per pupil to metro central areas and just $91 to rural/nonmetro areas (table 3). Only in the Southeastern States was this pattern reversed, but even in that region rural/nonmetro schools obtained less Federal aid per pupil for certain programs, such as vocational education. It is not clear whether these differences exist because of funding formula design or the inability of educators to submit timely and successful proposals (28, pp. 50-51).

Support staff

The funding difficulties experienced by rural/nonmetro school systems have severe repercussions on the number of support personnel such systems are able to maintain (22). Rural/nonmetro school systems have relatively fewer personnel supporting the instructional function (table 4). Among those personnel are supervisors of instruction, librarians, guidance counselors, psychological staff, audio-visual staff, and teacher aides. The percentage differences in many cases are striking. In 1971, for example, almost three-fourths (72.8 percent) of rural/nonmetro school systems had no instructional supervisors at all, in contrast to the 2.5 percent of metro systems that had none. Comparable figures for other support personnel in rural/nonmetro and metro school systems, respectively, were: librarians 41.8 and 1.6 percent; guidance counselors, 50.2 and 6.2 percent; psychological staff, 92.6 and 24.1 percent; audio-visual staff, 92.8 and 58.4 percent; and teacher aides, 49.5 and 7.5 percent. Every region was marked by these wide divergencies.

It has been argued that the relative number of support staff is lower in rural/nonmetro areas because the small size of many schools prevents them from employing full-time counselors and other professionals. Typically higher salaries prevailing in cities also may attract the most qualified professionals to those areas (9, p. 16). But the fact is that entire rural/nonmetro school systems do not have certain support staff members at all.

Support services

Support services are more than incidental to instruction; they provide human and material resources for the learning process. Prekindergarten and kindergarten classes familiarize children with the learning environment early in life. Libraries, especially those containing audio-visual media, give pupils access to vast knowledge resources outside the classroom. Vocational education and career guidance services forge important links between formal education and work. Special education programs are designed for unusual pupils (the handicapped, the gifted, slow learners) who deviate so far physically or mentally from typical students that the standard curriculum is unsuitable for their needs. Unfortunately, many rural/nonmetro school systems have neither the financial support nor the personnel to develop such services.

Table 3--Federal revenue receipts of public school systems per pupil in average daily enrollment, by program and selected categories, 1972-73

Region and metro-nonmetro status	Total 1/	ESEA 2/	SAFA 3/	Vocational education	Other
			Dollars		
United States	87.63	34.28	9.75	4.83	38.77
Metro:					
Central cities	133.33	53.78	7.61	6.77	65.17
Suburbs	55.77	17.67	11.49	2.62	23.99
Nonmetro	91.10	39.34	9.29	5.99	36.48
North Atlantic	96.19	39.21	10.83	4.31	41.84
Metro:					
Central cities	201.44	92.41	7.71	8.20	93.12
Suburbs	47.84	15.07	9.41	1.99	21.37
Nonmetro	73.97	27.30	17.90	4.69	24.08
Great Lakes and Plains	64.17	25.75	3.98	4.22	30.22
Metro:					
Central cities	119.51	47.70	3.62	6.81	61.38
Suburbs	35.95	12.08	4.64	2.34	16.99
Nonmetro	56.21	25.16	3.54	4.52	22.99
Southeast	115.26	46.8	9.30	8.79	50.36
Metro:					
Central cities	117.01	35.75	9.36	10.84	61.05
Suburbs	87.29	23.80	16.72	5.01	41.76
Nonmetro	129.75	62.72	5.29	10.16	51.5
West and Southwest	81.55	28.27	15.40	2.59	35.29
Metro:					
Central cities	97.24	35.88	10.13	3.68	47.55
Suburbs	65.24	22.31	17.29	2.28	23.36
Nonmetro	90.01	29.00	18.75	1.73	40.53

1/ Revenue from Federal sources includes funds from Federal programs going to local school systems either directly or through the State as a distributing agency. Not included is the amount for Federal programs going to agencies other than the local public school system (such as that part of ESEA Title I dealing with programs for State-operated or supported schools for the handicapped).
2/ ESEA stands for "Elementary and Secondary Education Act."
3/ SAFA stands for "School Assistance in Federally Affected Areas."

Source: (21, tables B.1, B.2, N.1, and N.2).

Rural/nonmetro children are more likely to enroll in school later than their metro counterparts, one reason perhaps being that proportionately fewer rural/nonmetro schools offer programs for 3 to 5-year-olds. In 1971, only 57.6 percent of rural/nonmetro public school systems reported having kindergarten programs (table 4) as compared to 87.5 percent of metro central and 79.8 percent of metro suburban school systems (22). The greatest disparity could be found in the Southeast, where nearly 40 percent more metro central than nonmetro school systems had kindergarten programs. Rural/nonmetro prekindergarten programs in all regions were virtually nonexistent.

Table 4--Public school systems with support programs and staff, by selected categories, 1971

Region and metro-nonmetro status	Programs			Staff					
	Pre-kindergarten	Kindergarten	Special education	Supervisors of instruction	Librarians	Guidance counselors	Psychologists	Audio-visual specialists	Teacher aides
	Percent								
United States	2.0	64.1	50.4	34.2	64.1	55.3	16.6	9.8	53.2
Metro:									
Central cities	25.9	87.5	86.3	97.5	98.4	93.8	75.9	41.6	92.5
Suburbs	2.3	79.8	62.2	48.0	77.1	67.2	36.7	14.2	57.6
Nonmetro	1.3	57.6	44.9	27.2	58.2	49.8	7.4	7.2	50.5
North Atlantic	3.9	74.3	61.3	51.4	72.6	67.3	32.8	13.4	66.7
Metro:									
Central cities	39.0	94.8	94.8	96.1	98.7	100.0	90.9	40.3	88.3
Suburbs	4.0	85.7	76.4	58.3	85.7	78.9	52.1	17.0	62.9
Nonmetro	2.3	64.0	47.4	43.6	60.6	56.3	14.3	9.2	68.9
Great Lakes and Plains	1.8	72.6	56.1	23.7	68.2	58.2	14.1	11.2	48.9
Metro:									
Central cities	31.7	98.8	98.8	98.8	100.0	100.0	87.8	78.0	96.3
Suburbs	1.6	87.8	75.9	45.7	86.6	78.7	32.6	19.3	55.6
Nonmetro	1.4	67.4	49.3	15.7	62.0	51.3	7.3	7.7	46.1
Southeast	1.7	31.2	63.6	65.1	90.2	86.1	12.7	15.4	82.4
Metro:									
Central cities	7.4	68.5	87.0	100.0	100.0	100.0	66.7	44.4	88.9
Suburbs	4.0	40.1	71.2	74.6	91.5	85.9	28.2	16.4	81.4
Nonmetro	1.3	28.8	61.8	62.7	89.7	85.7	8.9	14.3	82.3
West and Southwest	1.1	58.0	31.1	26.8	44.1	33.0	11.3	3.5	40.3
Metro:									
Central cities	21.5	83.2	70.1	96.3	96.3	81.3	60.7	13.1	94.4
Suburbs	1.0	69.9	30.9	36.9	55.8	39.8	27.0	5.1	51.7
Nonmetro	0.6	52.7	30.1	20.7	38.0	29.0	3.8	2.6	34.3

Source: (21, tables D through D.4).

As far as special education was concerned, less than one-half the rural/nonmetro public school systems nationally (44.9 percent) provided special education programs in 1971, compared to 86.3 percent of metro central and 62.2 percent of suburban (table 4). The West and Southwest region had the lowest percentage of rural/nonmetro school systems offering these programs, while the highest came in the Southeast, but in both regions metro schools were far ahead. One reason for this comparative showing is that sparsely settled districts often have too few special children to justify offering the programs. Some States furnish tuition assistance to permit special children to benefit from programs in nearby districts (28, p. 40).

Rural/nonmetro students are also disadvantaged when it comes to access to learning materials because there are no libraries in many schools, particularly at the elementary level (23). In 1974, over a quarter of rural/nonmetro elementary schools (27.0 percent) had no library or media center (table 5). On the other hand, only 11.0 and 14.9 percent of metro central and suburban elementary schools, respectively, lacked them. One interesting note: these facilities were seldom termed "media centers" or "other" in rural/nonmetro schools (elementary or secondary), suggesting that they contained just books and not additional materials like recordings, television, cassette players, and learning machines. The smaller size of rural/nonmetro elementary schools, plus a scarcity of funds and personnel probably account for deficient library services.

Table 5--Public schools with libraries/media centers (L/MC) and terms used to describe them, by metro-nonmetropolitan status and school level, 1974

Metro-nonmetro status and school level	Schools with L/MC	Terms used to describe L/MC		
		Library	Media center	Other
		Percent		
Metro:				
Central cities	90.5	61.7	28.1	10.2
Secondary schools	95.6	62.3	29.4	8.3
Elementary schools	89.0	61.5	27.7	10.8
Suburbs	88.3	65.1	24.4	10.5
Secondary schools	97.9	69.5	20.4	10.1
Elementary schools	85.1	63.4	26.0	10.6
Nonmetro	80.0	75.6	20.6	3.7
Secondary schools	97.3	77.5	19.0	3.5
Elementary schools	73.0	74.6	21.5	3.9

Source: (23, table 1).

Schooling of Rural Residents

Attainment

Rural/nonmetro students attend school systems with relatively fewer support staff and services, less revenue, and less per pupil expenditures. These facts alone, however, do not demonstrate the educational disadvantages of the rural/nonmetro labor force vis-a-vis their metro counterparts. In order to explore this question more

thoroughly and delimit labor force educational differences, it is necessary to examine several variables concerning the schooling of rural/nonmetro and metro residents. Attainment, or school years completed, is an excellent starting point for this endeavor.

During 1970-75, the gap between rural/nonmetro and metro males in median school years completed narrowed from 1.0 to 0.4 years (table 6) (33; 37). For females, there was no change in this difference; rural/nonmetro females continued to trail by 0.3 years. Thus in 1975 the general rural/nonmetro population 25 years old and over corresponded quite closely to metro persons in median school years completed. However, there were several subpopulations that continued to show noticeably lower attainment levels during the period. Among them were rural/nonmetro nonfarm black males and females, farm black males and females, and rural/nonmetro Hispanic males and females. Other data reveal that among younger people--25 to 44 years old--there were still markedly lower attainment figures for farm blacks and rural/nonmetro Hispanics for both sexes (37).

Critical to labor force participation is the attainment of at least a high school education, as employers upgrade hiring criteria to include more schooling. In 1975, 13.7 percent more metro than rural/nonmetro males 25 years old and over had completed at least 4 years of high school (table 7); for women, the comparable difference was 9.4 percent (33; 37). These figures were little changed from those for 1970, though the percentages of rural/nonmetro males and females who finished 4 years of high school or more did increase during the period. Once again, the subpopulations displaying much lower attainment levels were rural/nonmetro nonfarm blacks, farm blacks, and rural/nonmetro Hispanics, for both sexes.

Functional illiteracy

If one uses the conventional definition of functional illiteracy, that is, failure to complete at least 5 years of elementary school, then rural/nonmetro America has a serious illiteracy problem, particularly among minorities and those who live on farms. For rural/nonmetro blacks and Hispanics in 1975 (table 8), functional illiteracy rates were extremely high (33; 37). For example, 30.2 percent of rural/nonmetro black males (farm, 41.0) and 19.0 percent of rural/nonmetro black females (farm, 31.9) had not completed fifth grade. Functional illiteracy rates for black farm women actually increased during 1970-75. For Hispanics, 34.0 percent of rural/nonmetro males in 1975 had finished less than 5 school years, while 31.1 percent of rural/nonmetro females had done so.

When the data are broken down by age, functional illiteracy rates are found to be even higher among the older rural/nonmetro minority populations (37). This is detrimental to labor force participation for two reasons. First, older farm residents forced to leave their farms for financial reasons do not have the educational training in basic academic skills and specific job skills to seek other employment. Secondly, functionally illiterate parents and grandparents cannot provide a motivational example for their children and grandchildren to go to school, stay there and obtain the educational foundation necessary for career advancement. 6/

6/ Parents who have little schooling may encourage their children to pursue an education, but such parents cannot provide an example of this pursuit through their own accomplishments.

Table 6--Median school years completed by persons 25 years and older, by selected categories, 1970 and 1975

Race/ethnicity and metro-nonmetro status	1970		1975	
	Male	Female	Male	Female
	Years			
Total population:				
Metro 1/	12.3	12.2	12.5	12.4
Central cities	12.1	12.1	12.4	12.3
Suburbs	12.4	12.3	12.6	12.4
Nonmetro 2/	11.3	11.9	12.1	12.1
Nonfarm	11.6	12.0	12.2	12.1
Farm 3/	9.0	11.0	11.0	12.2
White:				
Metro	12.4	12.3	12.6	12.4
Central cities	12.2	12.2	12.5	12.3
Suburbs	12.5	12.3	12.6	12.5
Nonmetro	11.7	12.0	12.2	12.2
Nonfarm	12.0	12.1	12.2	12.2
Farm	9.1	11.5	11.4	12.2
Black:				
Metro	10.4	10.9	11.6	11.8
Central cities	10.4	10.9	11.5	11.7
Suburbs	10.3	10.8	12.0	12.0
Nonmetro	7.3	8.3	7.8	8.9
Nonfarm	7.6	8.4	8.1	8.9
Farm	5.1	7.0	5.9	7.8
Hispanic: 4/				
Metro	NA	NA	10.6	9.8
Central cities	NA	NA	9.7	9.0
Suburbs	NA	NA	11.8	11.2
Nonmetro	NA	NA	7.3	7.7
Nonfarm	NA	NA	7.4	7.7
Farm	NA	NA	5/	5/

NA = Not available.

1/ Metro refers to population residing in SMSA's; "central cities" includes (1) largest city in an SMSA and (2) additional city or cities in an SMSA with at least 250,000 inhabitants or a population of one-third or more of that of the largest city and a minimum population of 25,000; "suburbs" (designated as "outside central cities" by the Census Bureau) refers to population residing in an SMSA but outside of central cities.

2/ Nonmetro is defined as population residing outside of SMSA's.

3/ Nonmetro farm refers to population living in nonmetro areas on places of less than 10 acres yielding agricultural products which sold for $250 or more in the previous year, or on places of 10 acres or more yielding agricultural products which sold for $50 or more in the previous year; "nonmetro nonfarm" is defined as population living in nonmetro areas but not on farms.

4/ Hispanic refers to persons reporting themselves as Chicano, Mexican, Mexicano, Puerto Rican, Cuban, Central or South American, or other Spanish origin. Persons of Hispanic origin may be of any race.

5/ Data base less than 75,000 persons.

Source: (33, table 2; 37, table 2).

Table 7—Persons 25 years and older who have completed high school or 1 or more years of additional schooling, by selected categories, 1970 and 1975

Race/ethnicity and metro-nonmetro status	1970		1975	
	Male	Female	Male	Female
	Percent			
Total population:				
Metro 1/	59.7	58.7	67.5	65.0
Central cities	54.0	52.8	62.9	59.2
Suburbs	63.5	64.0	70.8	69.6
Nonmetro 1/	46.2	49.1	53.8	55.6
Nonfarm	47.9	49.7	54.9	55.6
Farm	35.5	44.7	44.7	56.2
White:				
Metro	62.2	60.9	69.5	67.1
Central cities	57.2	55.7	66.2	61.9
Suburbs	65.6	64.9	71.5	70.5
Nonmetro	48.2	51.6	56.0	58.1
Nonfarm	50.1	52.2	57.3	58.0
Farm	37.2	47.1	46.9	58.8
Black:				
Metro	37.4	40.0	47.2	48.5
Central cities	37.7	39.9	46.3	47.7
Suburbs	36.2	40.6	50.5	51.5
Nonmetro	19.6	21.4	23.7	26.1
Nonfarm	21.0	22.1	25.3	27.0
Farm	7.9	15.1	9.4	16.6
Hispanic:				
Metro	NA	NA	42.5	38.3
Central cities	NA	NA	37.9	33.9
Suburbs	NA	NA	48.9	45.5
Nonmetro	NA	NA	25.2	28.0
Nonfarm	NA	NA	26.3	27.5
Farm	NA	NA	2/	2/

NA = Not available.

1/ The definitions of metro and nonmetro are the same as those used in table 6 and will apply to all subsequent tables unless otherwise noted.

2/ Data base less than 75,000 persons.

Source: (33, table 2; 37, table 2).

Table 8—Persons 25 years and older who have completed less than 5 years of elementary school (functional illiterates), by selected categories, 1970 and 1975

Race/ethnicity and metro-nonmetro status	1970		1975	
	Male	Female	Male	Female
	Percent			
Total population:				
Metro	4.4	4.2	3.7	3.4
Central cities	5.7	5.6	5.3	4.8
Suburbs	3.2	2.9	2.6	2.2
Nonmetro	8.6	5.7	6.6	4.7
Nonfarm	8.4	5.7	6.6	4.6
Farm	9.6	5.3	7.1	5.1
White:				
Metro	3.4	3.6	2.9	2.8
Central cities	4.4	4.8	4.0	4.2
Suburbs	2.6	2.7	2.2	1.9
Nonmetro:	6.5	4.4	4.9	3.4
Nonfarm	6.4	4.5	4.9	3.4
Farm	7.0	3.5	5.0	3.5
Black:				
Metro	12.3	8.6	10.7	7.0
Central cities	11.7	8.3	10.6	7.1
Suburbs	14.4	10.1	11.0	6.9
Nonmetro	35.1	20.9	30.2	19.0
Nonfarm	33.2	20.2	28.9	17.8
Farm	49.5	27.3	41.0	31.9
Hispanic:				
Metro	NA	NA	14.8	16.4
Central cities	NA	NA	16.0	18.2
Suburbs	NA	NA	13.2	13.4
Nonmetro	NA	NA	34.0	31.1
Nonfarm	NA	NA	32.5	30.8
Farm	NA	NA	1/	1/

NA = Not available.

1/ Data base less than 75,000 persons.

Source: (33, table 2; 37, table 2).

Preprimary enrollment

Rural/nonmetro pupils are more likely to enroll in school later than metro pupils (20). Preprimary enrollment, which includes participation in prekindergarten and kindergarten programs, was a more common characteristic of metro areas, especially the suburbs, in both 1970 and 1975 (table 9). Although preprimary enrollment for rural/nonmetro whites and "other races" (mostly blacks) went up about 10 percent during 1970-75, metro preprimary enrollment increased similarly during the same period, except among suburban "other races" who experienced an almost 18-percent increase.

Table 9--Preprimary enrollment of children 3 to 5 years old, by race and metro-nonmetro status, 1970 and 1975 1/

Race and metro-nonmetro status	1970	1975
	Percent	
Total population:		
Metro:		
Central cities	39.4	49.9
Suburbs	43.2	54.1
Nonmetro	30.2	41.2
White:		
Metro:		
Central cities	39.1	49.6
Suburbs	43.6	53.9
Nonmetro	30.9	41.8
Other races:		
Metro:		
Central cities	40.2	50.3
Suburbs	38.6	56.2
Nonmetro	26.1	36.0

1/ "Preprimary" level is defined as including prekindergarten and kindergarten programs.

Source: (20, table 11).

This variable may seem to have little bearing on educational outcomes but in fact has great importance. Prekindergarten and kindergarten classes help orient children to the teaching methods and learning experiences of formal education. Exposure to these practices early may make them less alien, socially or intellectually, during later school years. Children who attend such classes also have a head start in developing communication and computational skills which are prerequisites for progress through the educational system. The fact that almost three-fifths of rural/nonmetro 3- to 5-year olds were not enrolled in school in 1975 indicates that many must try to "catch up" educationally to their metro (especially suburban) peers from the earliest school years. Of course, if preprimary programs continue to be less available in rural/nonmetro areas (table 4), there is no easy way the problem can be overcome.

Scholastic retardation

Although the age at which children begin school does vary, a child normally enters the elementary or primary level at age 6 and advances one grade each year. Those who fall below the grades expected for their age are classified as "scholastically retarded" in age-grade school progression (17, p. 118). In 1970, almost one-fifth or 19.9 percent of all children 8 to 15 years old from rural/nonmetro areas were scholastically retarded (table 10), compared to lower percentages for their counterparts in central cities and suburbs (32). The situation for blacks and Hispanic Americans was particularly severe. More than one-third of rural/nonmetro black and Hispanic 8- to 15-year olds were scholastically retarded.

Table 10--Scholastic retardation 1/ of children 8 to 17 years, by selected categories, 1970

Race/ethnicity and metro-nonmetro status	Both sexes 8 to 15 years	16 and 17 years	
		Male	Female
		Percent	
Total population:			
Metro: 2/			
Central cities 3/	18.6	27.1	18.2
Suburbs 4/	13.2	20.0	11.5
Nonmetro 5/	19.9	26.9	16.5
Black:			
Metro:			
Central cities	24.2	42.1	30.2
Suburbs	22.0	40.1	26.6
Nonmetro	34.4	51.1	36.7
Hispanic:			
Metro:			
Central cities	29.3	45.4	33.1
Suburbs	20.6	30.7	24.4
Nonmetro	38.6	51.2	39.5

1/ Scholastic retardation refers to enrollment in a grade below the modal grades for persons of a given single age.

2/ Metro, which in this case refers to "urbanized area," is defined as at least one city of 50,000 inhabitants or more and the surrounding closely settled area.

3/ Central cities refers to one or more cities of at least 50,000 inhabitants in an urbanized area

4/ Suburbs (designated as urban fringe by the Census Bureau) refers to the remainder of an urbanized area outside of the central cities.

5/ Nonmetro is defined as population not residing in urbanized areas and in places of 2,500 inhabitants or more outside urbanized areas.

Source: (32, table 8).

Retardation rates usually increase with age, since many teenage students below the level for their age first fell behind in the early school years, while some fell even further behind as they became older (17, p. 119). Scholastic retardation rates for black and Hispanic 16- to 17-year olds, male and female, were higher than the rates for both sexes 8 to 15 years old (table 10). The highest rates were sustained by minority males and females living in rural/nonmetro areas. Several reasons for this phenomenon have been surmised. Children from poor minority families may be absent from school more because they are less likely to get needed care for sickness; farmworker children are often pulled from school to help with harvests--a serious problem for migrant farmworker youth; inadequate transportation can cause involuntary absences (26, pp. 7-8); and rural/nonmetro children are less likely to have the educational head start afforded by preprimary programs. Whatever the reasons, high scholastic retardation rates mean that many rural/nonmetro young people will enter the labor force at an older age if they finish high school, and thus may be handicapped in job competition (17, p. 120).

Achievement

The National Assessment of Educational Progress (NAEP) tests have been given since 1969 on basic scholastic subjects to 4 age levels in several types of communities. Typically, rural/nonmetro individuals have demonstrated achievement levels below the Nation's--not as low as those in the inner cities of metro areas, but considerably below those representing the suburbs (8). "Extreme rural" 9-, 13-, and 17-year olds scored lower on every basic subject tested--reading, writing, mathematics, and science--than all other community resident types except "low metro" (table 11)(18). Unfortunately, the community data are not further subdivided into racial/ethnic categories, so it is impossible to tell if low test scores are more characteristic of disadvantaged minority populations. The large concentrations of poor minorities within the inner cities and rural/nonmetro areas, however, could be an important factor to consider. Even so, the NAEP data point to some basic deficiencies in rural/nonmetro student quality, at least as measured by standardized tests.

College plans

Since rural/nonmetro and central city residents have displayed similar shortcomings on the last two variables listed (scholastic retardation and achievement) one might expect both to be less prepared for college and therefore less inclined to plan a college education. But this is not the case. A survey of 1975 high school seniors (table 12) disclosed that over half (50.1 percent) of metro central city students planned to attend either a 2-year or 4-year college or both, yet only 40.9 percent of rural/nonmetro students did so (38). On the other hand, one-third (33.5 percent) of rural/nonmetro high school seniors did not plan to attend college at all, contrasted to a moderate 18.6 percent for metro central seniors. There is thus some aspect of the rural/nonmetro environment--whether in school, home, or community--which discourages young people from even attempting to continue their formal education to the higher levels necessary for advanced career development.

College enrollment

Considering the information just presented, it is not surprising that relatively few rural/nonmetro residents enter college. According to table 13 (34; 39), college enrollment rates of rural/nonmetro whites, blacks, and Hispanics were lower than those of their metro counterparts in all three age categories noted. There was little change in this pattern during 1970-75, although white college enrollment declined in most categories, while black enrollment generally increased. One interesting fact: college enrollment rates of 22- to 24-year olds rose during 1970-75 for rural/nonmetro

Table 11—National assessment of educational progress, by age of participants, type of community, and subject tested, 1969-73

Age and type of community	Difference from national median scores			
	Reading	Writing	Math	Science
9-year olds:				
National	70.4	28.3	36.7	63.2
Low metro 1/	-14.3	-14.2	-10.8	-15.1
High metro 2/	8.4	5.8	8.1	7.2
Main big city 3/	1.4	-2.9	-.9	-2.7
Urban fringe 4/	2.1	2.4	2.4	2.6
Medium city 5/	.1	2.1	.8	.8
Small places 6/	-.6	-.6	-.5	.9
Extreme rural 7/	-4.4	-4.6	-3.6	-6.3
13-year olds:				
National	68.1	55.4	51.3	58.3
Low metro	-8.1	-10.5	-14.9	-13.7
High metro	5.6	7.5	10.2	6.2
Main big city	-1.3	-.4	-1.0	-3.9
Urban fringe	2.2	1.8	1.5	2.8
Medium city	.4	1.8	.5	1.9
Small places	-.5	-.7	-.1	.5
Extreme rural	-3.9	-6.3	-2.1	-6.2
17-year olds:				
National	77.5	62.5	57.1	47.0
Low metro	-7.7	-10.4	-14.0	-7.4
High metro	5.6	6.6	9.9	5.1
Main big city	1.3	-.6	-2.4	.2
Urban fringe	1.2	3.0	1.8	.9
Medium city	.8	1.6	1.8	1.2
Small places	-1.4	0	.3	-1.5
Extreme rural	-2.6	-4.1	-4.1	-3.6

Note: Data are for the following years: 1969-70, science and writing; 1970-71, reading; 1972-73, mathematics.

1/ Areas in or around cities with a population greater than 200,000 where a high proportion of the residents are on welfare or are not regularly employed.

2/ Areas in or around cities with a population greater than 200,000 where a high proportion of the residents are in professional or managerial positions.

3/ Communities within the city limits or a city with a population over 200,000 and not included in the high or low metro groups.

4/ Communities within the metro area of a city with a population greater than 200,000 outside the city limits and not in the high or low metro groups.

5/ City with a population between 25,000 and 200,000.

6/ Communities with a population of less than 25,000 and not in the extreme rural group.

7/ Areas with a population under 10,000 where most of the residents are farmers or farm workers.

Source: (18, tables 25-27).

Table 12—Higher education plans of high school seniors, 14 to 34 years old, by metro-nonmetro status, 1975

High school seniors	Metro			Nonmetro
	Total	Central cities	Suburbs	
	Percent			
College:	49.8	50.1	49.5	40.9
2-year college only	6.9	6.0	7.4	5.6
4-year college only	27.4	27.5	27.4	20.6
2-year and 4-year college	15.5	16.5	14.8	14.7
May attend college:	24.9	27.5	23.2	22.5
2-year college only	7.7	7.6	7.8	6.5
4-year college only	1.9	2.1	1.8	1.4
2-year and 4-year college	15.3	17.7	13.6	14.6
Vocational training:	21.5	18.6	23.5	33.5
Plan to attend	4.1	3.5	4.5	9.0
May attend	3.2	3.6	2.9	5.5
Not attending	14.2	11.4	16.1	19.0
School plans not reported	3.8	3.9	3.8	3.1

Source: (38, table 1).

blacks but not for rural/nonmetro whites. This may have been due to more late enrollments by blacks, fewer late enrollments by whites, or earlier college graduation by whites. It may also indicate changes in graduate and professional school participation, since many people begin graduate work at the 22 to 24 age levels. Nevertheless, rural/nonmetro college enrollment rates overall were still much higher for white residents than for blacks or Hispanics.

Vocational training

It might be logical to assume that many rural/nonmetro young people would undertake vocational training in relatively large numbers because they do not enter college. However, among the 1970 general population 16 to 64 years old (table 14), just 18.8 percent of farm males and 24.1 percent of rural/nonmetro nonfarm males had received vocational training, compared to 30.8 percent of metro males (31). Whites, blacks, and Hispanics showed similar disparities with black farm males having the lowest rate, 10.5 percent. In every case, women had lower vocational training rates. (Only males and females with less than 15 years of school were included.) Other evidence suggests that rural/nonmetro vocational students more often take courses in agriculture and home economics rather than health, office/business, distributive education, or technical education (24).

In this matter, though, motivational deficiency may not be as important a factor as lack of opportunity. Rural/nonmetro young people are less likely to have vocational education programs available to them in high school than are metro students. The

Table 13—Persons 18 to 24 years old enrolled in college, by selected categories, 1970 and 1975

Race/ethnicity and metro-nonmetro status	1970			1975		
	18-19 years	20-21 years	22-24 years	18-19 years	20-21 years	22-24 years
	Percent					
Total population:						
Metro	39.3	32.6	15.9	39.3	32.9	17.6
Central cities	36.4	29.3	15.9	35.8	30.4	18.1
Suburbs	41.6	35.5	16.0	41.8	34.8	17.2
Nonmetro	33.7	25.7	11.2	31.1	23.9	11.1
White:						
Metro	41.3	34.6	17.0	40.8	33.8	17.8
Central cities	39.5	32.8	17.8	38.0	32.1	18.7
Suburbs	42.5	35.8	16.4	42.4	34.8	17.1
Nonmetro	35.9	26.5	11.8	32.5	24.7	11.2
Black:						
Metro	24.7	19.6	7.8	27.7	26.5	15.2
Central cities	23.3	16.4	7.3	25.9	23.7	13.9
Suburbs	28.6	29.3	9.4	32.5	35.6	18.6
Nonmetro	15.3	20.5	4.7	18.6	18.9	9.4
Hispanic:						
Metro	NA	NA	NA	26.3	28.1	13.6
Central cities	NA	NA	NA	25.2	29.5	13.2
Suburbs	NA	NA	NA	27.9	25.8	14.1
Nonmetro	NA	NA	NA	14.7	2.6	1/

NA = Not available.

1/ Data base less than 75,000 persons.

Source: (34, table 2; 39, table 2).

former are also less likely to have chances for vocational tryout experiences through work-study programs, a loss not only to occupational preparation but to their ability to make contacts with potential employers. Even rural/nonmetro adults have fewer opportunities for vocational training in postsecondary institutions or other adult education activities. Vocational training programs that do exist stress the more traditional subjects of agriculture and home economics (24; 9, pp. 14-15).

Adult education

Rural/nonmetro adults who have serious educational deficiencies or who wish to expand their learning skills could enroll in adult education programs. Rural/nonmetro adults fail to do this to any large degree, however (table 15)(19). For example, only

Table 14—Persons 16 to 64 years old with less than 15 years of schooling with vocational training, 1/ by selected categories, 1970

Race/ethnicity and metro-nonmetro status	Male	Female
	Percent	
Total population:		
Metro 2/	30.8	23.9
Nonmetro:		
Nonfarm	24.1	16.8
Farm	18.8	14.1
White:		
Metro	31.5	23.9
Nonmetro:		
Nonfarm	25.1	17.4
Farm	19.2	14.5
Black:		
Metro	25.6	23.3
Nonmetro:		
Nonfarm	13.5	9.7
Farm	10.5	7.9
Hispanic:		
Metro	21.8	17.4
Nonmetro:		
Nonfarm	15.6	11.4
Farm	13.4	10.2

1/ Includes formal vocational training programs completed in high school, apprenticeship programs, business schools, nursing or trade school, technical institutes, armed forces, or job corps training. Programs or single courses which are not part of an organized program of study, on-the-job training, training in company schools, training by correspondence, and basic or officers' training in the armed forces are excluded.

2/ Population residing in urbanized areas and in places of 2,500 inhabitants or more outside urbanized areas.

Source: (31, table 88).

24.7 percent of the 1972 total population participating in adult education classes were rural/nonmetro residents (nonmetro people then comprised about 32 percent of the total U.S. population) (36). Rural/nonmetro adult education enrollment in public elementary and secondary schools reflected still greater underrepresentation. Blacks and "other races" living in rural/nonmetro areas were also underrepresented, as well as having proportionately fewer postsecondary adult education activities than whites. It is not certain whether the generally unfavorable position of the rural/nonmetro population concerning this variable is due more to lack of opportunity or to insufficient motivation.

Table 15--Enrollment in adult education, 1/ by residence, race, and sponsor, 1972

Race and metro-nonmetro status	Total participants	Public schools, grades 12 and under	2-year college or technical-vocational institute	Private vocational, trade or business school	4-year college or university
			Percent		
Total population:	100.0	100.0	100.0	100.0	100.0
Metro	75.3	81.2	72.6	75.3	75.1
Central cities	31.0	29.4	29.8	38.2	32.1
Suburbs	44.3	51.8	42.8	37.1	43.0
Nonmetro	24.7	18.8	27.	24.7	24.9
White	100.0	100.0	100.0	100.0	100.0
Metro	74.7	81.5	71.7	73.9	74.1
Central cities	28.5	26.6	27.3	33.8	30.0
Suburbs	46.2	54.9	44.4	40.1	44.1
Nonmetro	25.3	18.5	28.3	26.1	25.9
Black	100.0	100.0	100.0	100.0	100.0
Metro	82.7	76.9	82.3	86.2	87.1
Central cities	62.1	58.5	55.9	74.3	61.5
Suburbs	20.6	18.4	26.4	11.8	25.5
Nonmetro	17.3	23.1	17.7	13.8	12.9
Other races	100.0	100.0	100.0	100.0	100.0
Metro	81.8	83.2	86.1	91.5	97.4
Central cities	56.3	37.2	62.3	91.5	69.0
Suburbs	25.4	46.0	23.8	0.0	28.4
Nonmetro	18.2	16.8	13.9	8.5	2.6

1/ Participant in adult education is defined as a person age 17 or over who is not a regular full-time student and is engaged in one or more activities of organized instruction--activities arranged to enhance learning in academic and occupational courses of any duration and at any level from basic orientation to professional refresher. Included are single sessions or multiple classes, workshops, seminars, institutes, lecture-discussion series, study groups, laboratories, shop courses, and other kinds of student-teacher instructional relationships.

Source: (19, table 20).

EDUCATIONAL OUTCOMES FOR THE RURAL/NONMETRO LABOR FORCE

Labor Force Status

Data presented in the two preceding sections can be used to make several generalizations about the educational background of the rural/nonmetro labor force. Comparisons between educational characteristics of rural/nonmetro and metro populations have shown that the former are more likely to: (1) Attend public schools that expend less for instruction, (2) enroll in school later, (3) progress through school more slowly, (4) complete fewer years of school, (5) score lower on national assessment tests, and (6) be classed as functional illiterates. Conversely, rural/nonmetro residents are

less likely to: (1) Attend public schools with supportive services and personnel, (2) complete 4 years of high school or more, (3) plan a college education, (4) enter college, (5) receive vocational training, and (6) enroll in adult education programs.

The population base displaying these educational attributes produces most members of the rural/nonmetro labor force, as well as those not working (there is some inmigration of metro trained people, as will be shown later). Therefore, one might expect that, first, members of the rural/nonmetro labor force would demonstrate lower educational levels than their metro counterparts; second, that this pattern would be reproduced for those not in the labor force; and, third, that there would be a large difference in educational attainment levels between rural/nonmetro labor force and nonlabor force members (those not classified as employed or unemployed) because the relative scarcity of better educated workers would enable them to market their skills more effectively in rural areas. 7/ It is assumed here that while education is not the only factor determining labor force participation, it is certainly a key one.

The 1977 educational attainment levels, measured by median school years completed of metro and nonmetro white labor force participants were nearly the same (table 16). But for "black and other races" there were large attainment differences between farm

Table 16--Labor force status and median school years completed of persons 16 years and older, by selected categories, 1977

Residence and race	In civilian nonlabor force 1/		In civilian labor force 2/	
	Male	Female	Male	Female
	Years			
White:				
Metro	11.4	12.2	12.7	12.6
Central cities	11.4	12.1	12.7	12.6
Suburbs	11.4	12.3	12.7	12.6
Nonmetro	10.1	12.0	12.4	12.5
Nonfarm	10.2	12.0	12.5	12.5
Farm	9.6	12.0	12.3	12.4
Black and other races:				
Metro	10.3	11.0	12.3	12.5
Central cities	10.2	10.9	12.3	12.4
Suburbs	10.6	11.7	12.5	12.6
Nonmetro	9.1	9.5	11.1	12.0
Nonfarm	9.1	9.5	11.4	12.0
Farm	9.5	9.1	7.1	9.4

1/ All persons not classified as employed or unemployed; persons doing only incidental unpaid family work (less than 15 hours) are also included in this group.
2/ The total of all civilian persons 16 years of age and over classified as employed or unemployed.

Source: (30).

7/ The expectation is that the rural/nonmetro labor force would consist primarily of better educated individuals, and the nonlabor force of poorly educated persons.

and metro males (5.2 years), as well as between farm and metro females (3.1 years). Labor force educational attainment levels for farm "blacks and other races" were also considerably below those for farm whites. These facts may be due to the rural-to-urban migration of many young blacks, leaving black farm workers who are, on the average, older than white workers living on farms or black workers living in metro areas. Older minorities generally have much less formal schooling (14, p. 57).

In 1977, metro residents not working exhibited higher educational levels than their rural/nonmetro counterparts, although the differences for white women were very small. There was also little disparity between attainment levels in rural/nonmetro areas for the white female labor force and those not working, perhaps indicating that rural/nonmetro white women are well educated as a group or that their better trained members are underrepresented in the labor force. For rural/nonmetro white males, plus males and females of "black and other races," data in table 16 correspond to the expected pattern: there is a large positive difference in the educational attainment levels between labor force and nonlabor force members. But one interesting anomaly should be noted. Black farm men in the labor force actually completed 2.4 school years less than black farm men not in the work force. Apparently, black farm males without jobs are younger, somewhat better educated individuals who have not migrated.

Labor Force Participation Rates

There is a distinct association between formal schooling and labor force participation. Generally, labor force participation rates tend to increase with higher education attainment levels (14, p. 53) (table 17). In 1977, labor force participation rose with more schooling for almost all population categories--white males and females and "black and other" males and females in both metro and rural/nonmetro areas. The most noteworthy exception to this tendency could be found among "black and other" farm males. The highest labor force participation rate for this group was for persons who had completed only 8 years of elementary school (85.6 percent). Their rate was larger than that for high school or college graduates (82.8 and 72.5 percent, respectively), a fact which points to the probable presence on farms of older, less educated, working black men next to their younger, better educated juniors who are not working. Thus, improved educational attainment as of 1977 has produced no advantage for black farm males.

Increased attainment does yield an advantage for "black and other" farm females, but only those with college experience. A high school education for this group does not create a larger rate of labor force participation than mere elementary school completion (22.4 and 35.1 percent, respectively). It should be noted that rural/nonmetro nonfarm females of all races show greater labor force activity at virtually every educational level, perhaps signifying superior off-farm employment opportunities. College-educated central city and suburban women (all races) are also somewhat more likely to work than their rural/nonmetro counterparts (table 17). This could be due to greater market demand for well-trained females in metro areas and greater freedom or necessity to make occupational choices there (42, p. 31). At any rate, it is a fact which reflects the recent tendency for better educated women to experience the highest increase in labor force participation (14, p. 55).

Occupations

Labor force participation in rural/nonmetro areas is not dominated by those following agricultural occupations. Yet farm employment is still important for rural/nonmetro labor market structure, just as farm production is for the economic

Table 17--Labor force participation rates 1/ of the population 16 years and older by residence, race, sex, and educational attainment, 1977

Race, sex, and metro-nonmetro status	Elementary		High school		College	
	Less than 8 years	8 years	1-3 years	4 years	1-3 years	4 years or more
	Percent					
White male:						
Metro	51.3	53.9	68.6	85.8	82.3	90.6
Central cities	51.0	52.5	67.7	83.0	79.6	88.7
Suburbs	51.6	54.9	69.1	87.3	83.9	91.7
Nonmetro	47.9	56.5	68.7	85.7	80.8	89.5
Nonfarm	46.5	53.1	69.0	85.0	80.3	89.4
Farm	58.1	74.7	64.1	91.2	85.9	91.8
White female:						
Metro	18.0	24.8	41.5	54.3	56.5	64.8
Central cities	18.9	23.7	38.3	54.6	58.7	66.7
Suburbs	17.0	25.7	41.9	54.1	55.1	63.6
Nonmetro	21.5	23.5	39.8	53.5	51.3	61.8
Nonfarm	21.7	24.6	40.5	54.4	52.5	62.7
Farm	18.6	15.8	31.8	44.4	38.7	48.9
Black and other male:						
Metro	50.7	56.9	62.3	82.8	79.6	88.4
Central cities	46.4	56.6	61.7	82.0	77.7	86.4
Suburbs	63.0	57.6	64.5	84.8	84.1	91.6
Nonmetro	57.9	63.6	61.3	84.4	72.6	91.3
Nonfarm	54.6	62.3	62.2	84.5	73.2	94.6
Farm	79.1	85.6	45.5	82.8	31.7	72.5
Black and other female:						
Metro	25.7	33.4	39.8	61.0	63.7	77.4
Central cities	24.9	33.8	37.0	60.5	62.9	78.8
Suburbs	28.3	32.2	49.7	62.4	65.4	74.9
Nonmetro	26.1	40.4	42.3	66.0	52.3	75.0
Nonfarm	26.1	41.1	43.4	67.4	53.5	74.7
Farm	26.9	35.1	23.6	22.4	38.5	79.5

1/ Percentage of the civilian noninstitutional population in the labor force. Source: (30).

system. 8/ Some changes have occurred in the educational attainment levels of agricultural workers during the seventies (33; 37). Male farmers and farm managers 25 to 44 years old experienced only a slight attainment increase during 1970-75 (0.3 school years), while male farm laborers and supervisors had a somewhat larger improvement (0.6 years) (table 18). But the latter group still lagged behind the former by over 3 years, about the same number of years male farm laborers trailed their female counterparts.

8/ The implication is that farm workers should not be ignored in considering the rural/nonmetro labor market structure despite their relatively small numbers.

Surprisingly, the major changes took place among older agricultural labor force members. Women farm laborers and supervisors 45 to 64 years old saw their educational attainment grow by a remarkable 3.1 years during 1970-75 to a level not far below that of younger male farmers. Male farmers and farm managers 45 to 64 also increased their attainment levels markedly (1.9 years), but older male farm laborers sustained only a 0.2 year rise from a dismally low 1970 level of 7.4 school years completed. Perhaps older male farmers and female farm laborers have taken advantage of adult education opportunities to obtain more formal schooling, while male farm laborers have not. To some degree, these changes may also have been due to chronological replacement of less educated older people by better educated younger people in the 45 to 64 age group.

Table 18--Median school years completed by employed persons 25 to 64 years old, by selected categories, 1970 and 1975

Age and occupation group	1970		1975	
	Male	Female	Male	Female
	Years			
25 to 44 years old:				
Professional and technical	16.6	16.3	16.8	16.4
Managers and administrators, excluding farm	12.9	12.6	14.4	12.9
Sales workers	13.4	12.4	14.2	12.6
Clerical workers	12.7	12.5	13.0	12.7
Craft workers	12.2	12.2	12.4	12.4
Operatives	11.8	11.1	12.2	12.0
Laborers, excluding farm	10.7	1/	12.1	12.2
Service workers	12.3	12.0	12.5	12.2
Farmers and farm managers	12.2	1/	12.5	1/
Farm laborers and supervisors	8.5	11.5	9.1	12.3
45 to 64 years old:				
Professional and technical	16.4	16.2	16.5	16.2
Managers and admininistrators, excluding farm	12.7	12.5	12.9	12.6
Sales workers	12.6	12.3	12.9	12.4
Clerical workers	12.5	12.5	12.5	12.6
Craft workers	11.3	12.0	12.1	12.2
Operatives	9.7	9.9	10.6	10.2
Laborers, excluding farm	8.5	1/	9.1	11.9
Service workers	9.8	10.0	11.2	11.1
Farmers and farm managers	9.0	1/	10.9	1/
Farm laborers and supervisors	7.4	8.9	7.6	12.0

1/ Data base less than 75,000 persons.
Source: (33, table 6; 37, table 4).

Because agricultural employment has declined, rural/nonmetro areas now contain millions of people who have little direct connection with farming. Nonfarm rural/nonmetro workers are currently employed in government, manufacturing, wholesale and retail trade, public and private services, and other job fields. The largest rural/nonmetro occupational group has become the blue-collar segment, although the fastest rising job category during the seventies has been "services" (2, p. 55; 7, p. 20).

Blue-collar workers (craft, operatives, and laborers except on farm) constituted 39.2 percent of the rural/nonmetro labor force, compared to only 32.0 percent for central cities and 32.3 percent for suburbs (table 19). Service workers comprised a larger percentage of the labor force in rural/nonmetro areas than suburbs, slightly less than in central cities. What should be observed here is that blue-collar and service occupations were filled by people who had completed approximately 12 school years or less (national averages). But professional and other white collar occupational groups, each averaging over 12.5 years, were underrepresented in the rural/nonmetro labor force (38.5 percent) in contrast to metro central (52.6 percent) and suburban (54.1 percent).

Table 19--Occupation groups of employed persons 16 years and older by metro-nonmetro status, and median years of school completed, 1974

Occupation group	U.S. total	Metro areas		Non-metro areas	Median school years
		Central cities	Suburbs		
	Percent				Number
Professional and technical	14.5	14.8	16.8	11.3	16.4
Managers and admininistrators, excluding farm	10.4	9.9	11.9	9.0	13.0
Sales workers	6.4	6.6	7.1	5.2	12.7
Clerical workers	17.6	21.3	18.3	13.0	12.6
Craft workers	13.5	12.0	14.1	14.2	12.3
Operatives, excluding transport	12.3	11.7	10.6	14.9	11.9
Transportation equipment operatives	3.8	3.6	3.4	4.3	12.1
Laborers, excluding farm	4.8	4.7	4.2	5.8	11.4
Service workers	11.8	13.5	10.8	11.5	12.1
Private household workers	1.5	1.6	1.1	1.9	10.4
Farmers and farm managers	1.9	—	.8	5.2	1/11.0
Farm laborers and supervisors	1.5	.2	.8	3.7	
Employed, total	100.0	100.0	100.0	100.0	

1/ Median number of school years for the final two categories combined.

— = Not applicable.

Source: (40, table N).

Income

The underrepresentation of white collar groups in rural/nonmetro areas may be partly explained by the lower earnings that these groups record compared to earnings of their metropolitan counterparts, particularly suburban (40). All rural/nonmetro occupational groups earned less in 1973 (table 20). But there were differences of about $3,000 to $4,000 between rural/nonmetro and suburban male professionals and managers; male blue collar and service worker income differences were not as great. Earnings of women demonstrated the same general pattern, except that female earnings were much less (roughly half in many cases) than male earnings. Male rural/nonmetro white collar occupations represented a lower economic payoff than male metro white collar jobs and thereby a smaller return on educational investment. The educational

investment of rural/nonmetro and metro women (commensurate with that of men), however, resulted in even lower payoffs. For both well-educated male and female workers, a metro location is more desirable because of enhanced earning capacity.

Table 20--Mean earnings of persons 16 years and older employed 50 to 52 weeks a year, by selected categories, 1973

Sex and occupation group	Metro areas		Non-metro areas	Median school years
	Central cities	Suburbs		
	---------Dollars---------			Number
Male:				
Professional and technical	14,946	16,788	13,812	16.6
Managers and administrators, excluding farm	15,716	17,711	13,339	13.3
Sales workers	12,165	14,018	10,646	13.0
Clerical workers	9,552	10,726	9,484	12.7
Craft workers	11,014	11,827	10,013	12.3
Operatives, excluding transport	8,874	9,843	8,543	12.1
Transportation equipment operatives	9,562	11,062	8,904	12.1
Laborers, excluding farm	8,179	8,227	6,313	11.4
Service workers	7,774	8,453	6,934	12.1
Private household workers	1/	1/	1/	1/
Farmers and farm managers	1/	9,393	8,858	12.0
Farm laborers and supervisors	1/	5,795	4,025	9.7
Female:				
Professional and technical	8,921	9,216	7,484	16.3
Managers and administrators, excluding farm	8,280	7,904	5,928	12.7
Sales workers	4,099	4,636	3,823	12.4
Clerical workers	6,320	6,154	5,299	12.6
Craft workers	6,329	6,566	5,493	12.3
Operatives, excluding transport	5,502	5,653	4,898	11.5
Transportation equipment operatives	1/	1/	1/	12.4
Laborers, excluding farm	1/	1/	1/	12.1
Service workers	4,515	4,201	3,521	12.1
Private household workers	2,240	2,360	1,654	10.4
Farmers and farm managers	1/	1/	1/	2/ 12.0
Farm laborers and supervisors	1/	1/	1/	

1/ Data base less than 75,000 persons.
2/ Median number of school years for the final two categories combined.

Source: (40, table 0).

In all areas, 1973 earnings increased with higher educational attainment for persons 25 years and older (table 21) (40). But those earnings were more for metro than rural/nonmetro residents at each educational level attained (both races and sexes). For example, suburban white males who graduated from college earned $3,000 to

$4,000 more than their rural/nonmetro classmates. The disadvantaged earnings position borne by white women and blacks--those of their members living in rural/nonmetro areas having the greatest disadvantage--is evident (table 21). What can be seen here is a hierarchy of individual economic payoffs on educational investment which proceeds in descending order: metro white males, rural/nonmetro white males, metro black males, rural/nonmetro black males, metro white females, metro black females, rural/nonmetro white females, and rural/nonmetro black females.

Table 21--Mean earnings of persons 25 years and older by selected categories, 1973

Metro-nonmetro status and school years completed	White		Black	
	Male	Female	Male	Female
	Dollars			
Metro:				
Central cities:				
Elementary:				
Less than 8 years	7,036	3,396	7,042	2,910
8 years	8,906	3,754	7,105	2,880
High school:				
1-3 years	9,949	4,077	7,171	3,385
4 years	11,059	5,167	8,421	4,987
College:				
1-3 years	12,294	5,777	8,656	5,693
4 years	14,888	6,720	11,653	7,597
5 years or more	17,416	8,677	1/	1/
Suburbs:				
Elementary:				
Less than 8 years	7,898	3,040	5,127	1/
8 years	9,008	3,896	1/	1/
High school:				
1-3 years	10,629	3,857	7,518	3,755
4 years	12,338	4,710	9,183	4,507
College:				
1-3 years	13,724	5,247	1/	6,052
4 years	16,613	6,581	1/	1/
5 years or more	18,869	8,788	1/	1/
Nonmetro:				
Elementary:				
Less than 8 years	5,791	2,489	3,463	1,256
8 years	7,381	2,724	3,966	1,710
High school:				
1-3 years	8,506	2,990	5,727	2,666
4 years	10,369	3,814	6,789	3,346
College:				
1-3 years	10,743	4,229	1/	1/
4 years	13,545	5,979	1/	1/
5 years or more	15,813	7,963	1/	1/

1/ Data base less than 75,000 persons.

Source: (40, table 10).

Migration

It has been suggested that better educated rural/nonmetro Americans would be attracted to metro areas because of greater job opportunities and superior earning capacity there. The data in table 22 (35) seem to indicate that this has been the case. Of all rural/nonmetro whites over 18 who moved to metro areas during 1970-75, 46.0 percent had college experience, while only 20.1 percent had less than a full high school education. Conversely, of all metro whites over 18 who went to rural/nonmetro places to live, 34.5 percent were college trained, but 29.5 percent had less than 4 years of high school. Therefore, rural/nonmetro areas lost a higher proportion of their well-educated white population and a lower proportion of their less educated white population than cities did. The situation for blacks was somewhat similar but, as one might expect from data presented earlier, percentages of college-trained blacks were smaller.

Of all rural/nonmetro males 16 years and over who moved to metro areas during 1970-75, 54.5 percent had white collar occupations, while 45.5 percent performed blue-collar, service, and farm jobs (table 23). For those metro males 16 and over moving to rural/nonmetro areas, 45.2 percent were white collar workers and 54.8 had blue-collar, service, and farm occupations. Rural/nonmetro areas thus lost a larger proportion of males who performed white collar work than cities did.

The exodus of better educated people from rural/nonmetro areas, people who are most likely young (28, p. 12) and entering white collar occupations with greater earning potential, has left behind a rural/nonmetro labor force composed mainly of older, poorer, and less educated people. This may partially explain why the educational levels of this labor force and of the rural/nonmetro population as a whole are comparatively low. It does not, however, account for the often wide disparities found for the other educational variables examined.

POLICY IMPLICATIONS

The last point concerning migration of labor force members strongly implies that educational improvements alone cannot solve the rural/nonmetro development problem. Merely providing better scholastic and career training for people who leave for the metro job market will do little to encourage development of rural/nonmetro America. Job opportunities in the latter area can be expanded through private and/or governmental initiative to make the labor market more accommodating to better educated workers. Efforts directed only to the educational institution will not increase either the quantity or quality of work opportunities (11, p. 29).

Education can help promote rural/nonmetro development by instilling basic academic skills, career and vocational abilities, learning flexibility for retraining in new skills, and disciplinary aptitudes necessary for work. A labor force possessing these characteristics would be more attractive to industry considering location or relocation in rural/nonmetro areas (29, p. 33; 44, p. 43). And a labor force having such capabilities would be ready to effectively perform the tasks assigned to it.

But if rural/nonmetro workers are to contribute their full efforts to development, the educational attributes summarized earlier must be improved. Information presented in this report suggests some tentative policy directions which might lead to the latter goal.

Table 22--Percentage of nonmovers and movers to and from SMSA's by race and school years completed of persons 18 years and older, March 1970-75 1/

Race and school years completed	Nonmovers		Movers	
	SMSA's	Outside SMSA's	From outside SMSA's to SMSA's	From SMSA's to outside SMSA's
	Percent			
White	100.0	100.0	100.0	100.0
8 years or less	18.2	27.9	8.4	12.4
High school:				
1-3 years	15.7	16.7	11.7	16.1
4 years	39.4	37.0	33.9	37.1
College:				
1-3 years	14.5	10.8	21.5	16.9
4 years or more	12.2	7.6	24.5	17.6
Black	100.0	100.0	100.0	100.0
8 years or less	29.9	52.0	17.8	25.3
High school:				
1-3 years	23.7	19.8	15.7	23.5
4 years	30.3	20.4	41.7	30.4
College:				
1-3 years	10.9	4.3	11.3	9.9
4 years or more	5.3	3.5	13.5	10.8

1/ "SMSA" refers to Standard Metropolitan Statistical Area and collectively corresponds to the term "metro" used in previous tables, except tables 10, 11, and 14.
Source: (35, table 8).

Table 23--Percentage of nonmovers and movers to and from SMSA's by occupation group of employed civilian males 16 years and older, March 1970-75

Occupation group	Nonmovers		Movers	
	SMSA's	Outside SMSA's	From outside SMSA's to SMSA's	From SMSA's to outside SMSA's
	Percent			
Total population:				
Professional and technical	15.0	8.7	25.3	18.9
Managers and administrators, excluding farm	15.3	12.8	15.9	14.1
Clerical workers	7.8	4.7	6.3	4.3
Sales workers	6.7	4.1	7.0	7.9
Craft workers	20.8	20.8	17.3	20.0
Operatives	16.3	18.9	13.3	13.7
Laborers, excluding farm	6.7	8.2	6.9	6.3
Service workers	9.6	7.1	6.2	8.7
Farm workers	1.8	14.7	1.8	6.1
Total	100.0	100.0	100.0	100.0

Source: (35, table 14).

Education of the Disadvantaged

Blacks and Hispanics are two rural/nonmetro minority groups at a severe educational disadvantage, compared both to their metro counterparts and the rural/nonmetro white population. Considering the poor learning background of these minorities, it is not astonishing that they have the lowest income levels and labor force participation rates. Without educational upgrading, they can contribute little to social and economic development. Special manpower training programs for teenage or adult rural minorities may aid their vocational preparation but cannot overcome all learning deficiencies caused by inadequate schooling. Early childhood education, remedial programs in basic skills, career training, guidance counseling, bilingual instruction and other measures might be strengthened to help rural disadvantaged students during their formative years. While the Federal Government and some States have provided considerable aid to disadvantaged metro pupils, more effort could be directed toward rural/nonmetro populations.

Education of the Farm Population

Some disadvantaged rural/nonmetro minorities are farm residents, perhaps accounting for the lower educational attainment levels generally recorded by the farm population. However, older white farm dwellers also are somewhat below average in schooling. Older farmers and farm laborers, particularly men, need to have adult education experiences if they are to increase their attainment levels and learn new occupational skills. Younger black farm males, whose better schooling presently gives them little advantage in labor force participation, require career counseling and training so they may seek off-farm employment. The same may be said for farm women, both white and black. Indeed, young black farm males and farm females of all races constitute a virtual "reserve army of the underemployed" whose potential abilities could be utilized for rural/nonmetro industrial and public service expansion.

Career and Adult Education

Career education would be a useful means for improving the work preparation of all rural/nonmetro Americans, not just farm dwellers. The term "career education" refers to those experiences through which students learn about work, including basic academic study, awareness of work values, counseling, exploration of alternative occupations, work-study programs, job placement services, and vocational education. These experiences can help people make more informed choices in both white- and blue-collar occupational fields. The obvious underrepresentation of professional and other white-collar positions in rural/nonmetro areas cannot be overcome solely through career training, but at least subpopulations like younger blacks and women who are now less likely to have such jobs may be encouraged to seek the necessary education. Also, older rural/nonmetro Americans, now suffering lower attainment levels and higher functional illiteracy rates, could greatly improve their skills through adult career education programs. Unfortunately, Government support for career and adult education in rural/nonmetro areas has not been extensive.

Basic Skills Training

Data examined earlier show that rural/nonmetro students are deficient in basic scholastic subjects, are less likely to acquire the college education which is prerequisite for professional careers, and are less likely to receive vocational training to prepare for other than professional work. Those who are underprepared academically and vocationally have greater probablity of being relegated to the level of unskilled or semi-skilled labor; in turn, they will be the most likely to sustain underemployment. To help prevent this result, it is imperative to give rural/nonmetro people sound educational groundwork in mathematics and communications which they will later need for any career specialization. Some alternative ways to attain this outcome include increased use of achievement testing in schools, new basic skills programs supported at local, State, and Federal levels, heightened parental involvement, and intensive use of educational technologies.

Employment Expansion

In order for the aforementioned policy directions to be successful in promoting rural/nonmetro development, the outmigration flow of better educated and white-collar workers to cities must be reduced. This means that not only will more economically rewarding positions have to be created but that such positions must offer income commensurate with similar jobs in cities. Payoffs on educational investment also will have to become more equitable for women, blacks, and other minorities to draw them into the local labor force and prevent their migration. While efforts outside the educational establishment must be made, there is much that can be done from within. Improved financial support could allow local school systems to initiate new support services requiring more positions for appropriate personnel. Population growth in many rural/nonmetro areas may also generate the need for larger schools, making more teaching and nonteaching jobs available. In turn, an expanded educational labor force furnishes a stronger base for training other workers who can contribute their skills to rural/nonmetro development.

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* U. S. GOVERNMENT PRINTING OFFICE : 1978 261-496/153